

REMARKS

Claims 1-67 were presented for examination and were pending in this application. In the latest Office Action, claims 1-67 were rejected, and claims 42 and 44 were objected to. With this amendment, claims 14, 40, 43, 45, and 60 are amended. On the basis of the following remarks, consideration of this application and allowance of all pending claims are requested.

I. Claim Objections

The second instance of claim 42 has been correctly numbered as claim 43 and amended to depend from claim 42, per the examiner's suggestion. Similarly, the second instance of claim 44 has been correctly numbered as claim 45 and amended to depend from claim 44, per the examiner's suggestion.

II. Claim Rejections: Claims 1-30

Claims 1-6, 9, 10, 14, 15, and 21-30 were rejected as made obvious by U.S. Patent No. 6,106,457 to Perkins et al. in view of U.S. Patent No. 5,093,730 to Ishii et al. Applicants respectfully traverse this rejection.

Claims 1 recites a system for printing time-based media that includes a media processing system. The media processing system determines a printed representation of the time-based media and an electronic representation of the time-based media. The media processing system resides at least in part on a printing system and at least in part on a network device, where the printing system and network device are part of a network. As explained in the specification, various types of processing may be performed on the time-based media to generate the printed and electronic representations of that media.

By locating the media processing system at least in part on a printing system and at least in part on a network device, the processing of the time-based media is distributed across the printer and one or more computing devices on a network. This helps to “relieve[] at least some of the processing load on external devices that the printer’s additional functionality may require.” (Specification, ¶ 10.) The distributed processing of the time-based media may also relieve the printer from having to take on the entire processing load, thus “avoid[ing] slow-downs that can result from a heavy processing load, which may be especially important for shared printers.” (Specification, ¶ 50.)

To reject claim 1 the examiner cited Perkins, which describes a compact imaging instrument that captures data about a patient in a healthcare setting. As Fig. 35 of Perkins illustrates, the instrument can be placed in a cradle and the video data downloaded from the instrument to a local computer. The data can then be printed on a standard printer (e.g., element 66 of Fig. 2) to produce a data sheet like the one shown in Fig. 43. As asserted in the Office Action, the processing required to generate the printed output would be performed by software on the local computer; therefore, that software would form part of the claimed “media processing system.” Because this software resides on the personal computer, the examiner acknowledged that Perkins does not disclose a media processing system that is at least in part on the printing system. However, Ishii describes a printer that receives a video signal and prints a video image based on that signal. The examiner therefore proposed using Ishii’s printer in Perkins’s system to achieve the claimed system.

This combination is improper because it simply does not work, and it would not achieve the claimed system. As illustrated in Fig. 2 of Ishii, the printer receives a raw video signal and prints selected frames from that signal. Ishii describes the printer as follows:

Referring to FIG. 2, an input terminal 14 is supplied with signals such as NTSC composite video signal or R, G and B video signals and so on having different horizontal scanning frequencies and different horizontal scanning lines. The selected video signal is supplied through the input terminal 14 to a video signal processing circuit 15, and the video signal processing circuit 15 processes the signal, for example, the composite video signal applied to the input terminal 14 in various signal processing manners and also separates the composite video signal to provide a video signal 15b and a synchronizing (i.e. sync.) signal 15a.

(Ishii, col. 6, line 53, to col. 7, line 1.) As this passage explains, the printer disclosed in Ishii receives an analog video signal at an input terminal and then decodes the signal so that frames can be extracted from the video. Selected frames extracted from the video signal are then printed on paper.

Because of its highly specific functionality, Ishii's printer is useless in Perkins's system. The Office Action suggests that one might connect the physician's personal computer (element 1012) described in Perkins to the printer described in Ishii, so that video images could be sent from the personal computer to the printer. But this configuration could not achieve the claimed system. If the personal computer were just to feed video images (captured by the instrument, element 732) to the printer, the personal computer would not be performing any of the claimed processing on time-based media. Specifically, the computer would not have played any role in processing the media to produce the printed output (e.g., Perkins's Fig. 43). Conversely, if the personal computer were to process the data and then provide Ishii's printer with digital data for producing a printed output, Ishii's printer would not be able to use that data because of its specialized functionality. Ishii's printer only receives a video signal, not digital data from a computer system. Functionally, there is no way that Ishii's printer could operate with Perkins's system in the way the Office Action proposes. The rejection, which relies on this untenable combination, is likewise untenable.

It is further noted that Ishii cannot be modified to cure this deficiency. The purpose and principle of operation of Ishii is to print video images based on a received video signal. (Ishii, col. 3, lines 9-15.) Modifying Ishii to accept a digital data signal from a computer that is not a video signal would destroy the primary purpose and principle of operation of Ishii. Where a proposed modification of a reference would change a principle of operation of that reference, an obviousness rejection cannot be maintained thereon. MPEP § 2143.03; *In re Gordon*, 733 F.2d 900 (Fed. Cir. 1984). Accordingly, no allowable modification of Ishii can be implemented in Perkins to achieve the claimed invention.

Lastly, it is respectfully observed that neither Perkins nor Ishii suggests distributing the processing of time-based media between a printing system and a network device. At best, Perkins discloses some sort of processing performed entirely on a computer. Similarly, Ishii discloses some sort of processing of a video signal performed entirely on a printer. The concept of distributing the processing is found only in the present application and in the claims, but there is no suggestion of doing so in the cited references.

Because the suggested combination of Perkins and Ishii is impossible, would fail to achieve the claimed invention, would destroy a principle of operation of the references, and lacks any suggestion or motivation even for being made, the rejection of claim 1 is improper. Claim 1 is thus patentable over the cited references.

Claims 2-6, 9, 10, 14, 15, and 21-30 depend from claim 1 and are therefore patentable over the proposed combination of Perkins and Ishii for the same reasons outlined above.

Claims 7 and 8 were rejected as obvious under Perkins and Ishii, in further view of U.S. Patent No. 5,682,330 to Seaman et al.; claim 11 was rejected under Perkins and Ishii, in further view of U.S. Patent No. 5,774,260 to Petitto et al.; claim 12 was rejected under Perkins and Ishii,

in further view of U.S. Patent No. 5,444,476 to Conway.; claim 13 was rejected under Perkins and Ishii, in further view of U.S. Patent No. 4,907,973 to Hon.; claims 16 and 17 were rejected under Perkins and Ishii, in further view of U.S. Patent No. 6,466,534 to Cundiff.; claims 18 and 19 were rejected under Perkins and Ishii, in further view of Cundiff and U.S. Patent No. 5,903,538 to Fujita et al.; and claim 20 was rejected under Perkins and Ishii, in further view of U.S. Patent No. 6,153,667 to Howald. In each of these rejections, Perkins and Ishii were applied to the claim in the same way they were applied to claim 1; therefore, these rejections suffer from the same deficiencies identified above. The claims are thus patentable over the cited references.

III. Claim Rejections: Claims 31-49

Claims 31-33, 40, 41, 47, and 48 were rejected as anticipated by Perkins. Applicants respectfully traverse this rejection.

Claims 31 recites a networked printing system for printing time-based media that includes a printing device and a computing device, both coupled to a network. The printing device includes output sources for producing a printed representation and a corresponding electronic representation of the time-based media. Claim 31 further requires that both the computing device and the printing device process the time-based media to produce the printed representation and the electronic representation. As explained above, performing the processing of the time-based media on both the computing device and the printing device allows for distribution of the processing load. This can avoid slow-downs due to too much processing on either a computer or on the printer itself.

To map the claims to Perkins, the examiner cited Perkins's personal computer (element 1012) for the claimed "printing device," where the claimed "first output source" is the output source that generates the hard copy of Fig. 43 and the claimed "second output source" is the

interface that generates transmitted data. The examiner further cited the block diagram in Perkins's Fig. 34 for the claimed computing device. Finally, the examiner cited the "digital video processing engine" shown in the block diagram of Fig. 34 for the limitation: "wherein the computing device and the printing device process the time-based media to produce the printed representation and the electronic representation."

There are a number of problems with this application of Perkins to claim 31. First, Perkins's personal computer (element 1012 in Fig. 35) is not a "printing device," as claimed. The claimed "printing device" includes an output source that can produce a printed representation of the time-based media. A conventional printer, for example, has this capability; a personal computer does not. It is true that the personal computer could be connected to a printer for printing a hard copy, as Perkins discloses, but that does not make the personal computer into a "printing device." In such a configuration, the printer to which the personal computer is connected would be the "printing device" (assuming it includes the other features of the claimed "printing device"). The only printer mentioned in Perkins is a standard printer (element 66, shown in FIG. 2), but there is no discussion of processing done by the printer.

Moreover, Perkins fails to disclose the limitation that both "the computing device and the printing device process the time-based media to produce the printed representation and the electronic representation." In the Office Action, the examiner suggests that this claim limitation is performed by the "digital video processing engine" block of Fig. 34, which illustrates is a block diagram of the diagnostic instrument (e.g., element 732A, shown in Fig. 35). Under the examiner's mapping of the claim limitations, Fig. 34 does not depict any aspect of the claimed "printing device" (which the examiner asserts to be the personal computer, 1012). The "digital video processing engine" block cannot satisfy a limitation that relates to processing performed

by both the claimed “printing device” and the claimed “computing device,” since that block is not part of both devices. Claim 31 requires that both the printing device and the computing device process the time-based media. The “digital video processing engine” is just a processing block in a single device, in this case the diagnostic instrument. Accordingly, it does not achieve the distributed processing between a printing device and a computing device, as claimed.

Lastly, the claimed processing performed by the printing and computing devices is to produce the printed and electronic representations; not just any type of processing satisfies this limitation. There is no disclosure in Perkins that the “digital video processing engine” performs the claimed processing to produce the printed and electronic representations of the time-based media. For example, the personal computer (element 1012) could by itself process data received from the instrument to produce the data needed to print the report shown in Fig. 43.

Nevertheless, Perkins is silent about where such processing would occur.

Because Perkins fails to disclose several of the claimed limitations, claim 31 is novel over Perkins. Claims 32, 33, 40, 41, 47, and 48 depend from claim 31 and are therefore novel over Perkins for the same reasons outlined above.

Claims 35, 36, and 49 were rejected as obvious under Perkins; claim 34 was rejected under Perkins in view of Seaman; claim 37 was rejected under Perkins in view of Petitto; claim 38 was rejected under Perkins in view of Conway; claim 39 was rejected under Perkins in view of Hon; claims 42 and 43 were rejected under Perkins in view of Cundiff; claims 44 and 45 were rejected under Perkins in view of Cundiff and Fujita; and claim 46 was rejected under Perkins in view of Howald. In each of these rejections, Perkins was applied to the claim in the same way it was applied to claim 31; therefore, these rejections suffer from the same deficiencies identified above. The claims are thus patentable over the cited references.

IV. Claim Rejections: Claims 50-67

Claims 50, 51, 60, 61, 66, and 67 were rejected as anticipated by Perkins. Applicants respectfully traverse this rejection.

Claim 50 recites a method for printing time-based media that includes the step of processing the time-based media to determine a printed representation and an electronic representation of the time-based media. Claim 50 requires that the processing be performed at least in part within a printing system and in part within a network device coupled to the printing system via a network.

In the Office Action, Perkins was applied to claim 50 in the same way it was applied to claim 31, discussed above. Namely, the examiner suggested that Perkins's personal computer (element 1012) is the claimed "printing system" and that the "digital video processing engine" of Perkins's Fig. 34 is the claimed "network device." This rejection thus suffers from the same problems identified above, and it should be withdrawn. Because Perkins fails to disclose several of the claimed limitations, claim 50 is novel over Perkins. Claims 51, 60, 61, 66, and 67 depend from claim 50 and are therefore novel over Perkins for the same reasons outlined above.

Claims 52-54 and 62-65 were rejected as obvious under Perkins in view of Cundiff; claims 55 and 56 were rejected under Perkins; claim 57 was rejected under Perkins in view of Petitto; claim 58 was rejected under Perkins in view of Conway; and claim 59 was rejected under Perkins in view of Hon. In each of these rejections, Perkins was applied to the claim in the same way it was applied to claim 50; therefore, these rejections suffer from the same deficiencies identified above. The claims are patentable over the cited references.

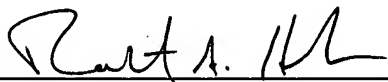
V. Summary

Based on the foregoing, the application is in condition for allowance of all claims, and a Notice of Allowance is respectfully requested. If the examiner believes for any reason direct contact would help advance the prosecution of this case to allowance, the examiner is encouraged to telephone the undersigned at the number given below.

Respectfully submitted,

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